



Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Our commitment is to provide our customers with a safe, clean, and reliable supply of drinking water. We would like the public to be assured that we will continue to monitor, improve, and protect the water system and deliver a high quality water direct from the tap. We know that water is the most indispensable product in every home and we ask everyone to be conservative and help us in our efforts to protect the water sources and the water system. Please report any activity that might jeopardize the water supply.

**2015 Annual Water Quality Report**  
**Edmonson County Water District**  
PWSID# 0310114 Facilities A & B  
Water testing performed in 2014

We are pleased to present this years Annual Water Quality Report. This report is designed to inform the public about the quality of water and services provided on a daily basis. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our customers and resources. We are committed to ensuring the quality of your water with lines in Edmonson, Hart, Grayson, Warren and Butler Counties with a combined total population of over 32,000 people. Brownsville WTP is our facility "A" and serves over 15,200 people and Wax WTP is our "B" facility and serves over 16,700 people.

In conjunction with the Barren River Area Development District, Edmonson Co. Water District has developed a Source Water Assessment and Protection Plan for Brownsville WTP "A" and with The Lincoln Trail Area Development District for Wax WTP "B". Both are classified as surface water treatment facilities. The Brownsville WTP draws water from Green River and Wax WTP draws water from Nolin Reservoir. The susceptibility of contaminants is in the moderate category due to the route of the rivers. The rivers pass through towns, under bridges on major roads, close to underground storage sites, agriculture activities and oil and gas production facilities. A complete source water assessment can be obtained and viewed at the Edmonson Co. Water District office located at 1128 Hwy. 259 N, Brownsville, KY between 8am and 4:30pm Mon-Fri. Our regular scheduled board meetings are on the 2nd and 4th Tues. at 8:30am. Also available by request is a complete list and report of all parameters of contaminants that are sampled for each year.



**"Thank You" if you have reported a leak.**  
**Please continue helping us watch for leaks.**

[www.ecwdwater.com](http://www.ecwdwater.com)

The Edmonson County Water District's Goal is to continually improve the water facilities that provide you "our customers" with a safe and dependable supply of drinking water. We want you to be aware of the efforts we make daily to provide this service.



The Edmonson County Water District is blessed with two excellent sources of Raw Water. Please help keep pollution out of these waters. Always follow direction when applying sprays and fertilizer. Please do not dump trash of any sort into these streams. The cleaner the Raw Water supply, the less treatment is required.



Brownsville WTP



The Brownsville WTP is on Green River being our facility "A", that serves over 15,200 people and our Wax WTP is on Nolin Lake being our facility "B", that serves over 16,700 people.

Wax WTP



Please visit our website at [www.ecwdwater.com](http://www.ecwdwater.com). We now provide online service that includes bill payment, history and usage reports.

The Water District also consists of approximately 684 miles of water mains in Edmonson, Hart, Grayson, Warren and Butler Counties, 17 storage tanks, main office building, and 2 maintenance and storage buildings. The Water District will continue to provide its 10,000± customers with dependable service at a reasonable price.



Our Treatment Plant and Distribution Line Operators are license professional that work long hours seven (7) days a week, three hundred sixty-five (365) days a year so that you are provided with quality service. The Edmonson County Water District's Wastewater Division is currently providing service to existing customers. In March 2015, the Sewer System in the Chalybeate Springs area was completed and put into operation. The Water District is in the process of installing hook-ups for customers. Anyone desiring to hook on to the Sewer System or has questions can contact the Water District office.



PWSID# 0310114  
P.O. Box 208 • Brownsville, KY 42210  
System Manager: Tony Sanders  
270-597-2165  
CCR Contact: Tim Brewster  
270-597-3591

Facility ID		Facility A - Brownsville WTP				Facility D - Distribution			
		Facility B - Wax WTP							
		Allowable Level		Highest Level Detected		Lowest Monthly %		Violation	Likely Source
Turbidity	A=	Never more than 1.0		0.28		100%		No	Soil Runoff
	B=	NTU. Less than 0.3		0.29		100%		No	
	NTU 95% of samples								
Contaminant		Sample Date	MCL	MCLG	Amount Detected	Range	Violation	Likely Source	
Total Coliform Bacteria(#pos)	D=	30 Mthly	5%	0	1	-	N	Naturally present in environment	
Total Organic Carbon(ppm)	A=	Monthly	N/A	1.0 (ratio avg.)	1.6	1.1 - 1.7	N	Naturally present in environment	
	B=				2	.90 - 2.2	N		
Mthly ratio is the % TOC removal achieved to the % TOC removal required. Lowest annual avg. of ratios must be 1.00 or greater.									
Copper(ppm)	D=	Sept 2014	AL= 1.3	0	0.021 (90th percentile)	.01 to .46	N	Corrosion of household plumbing systems	
Lead(ppb)	D=	Sept 2014	AL=15	0	2.1 (90th percentile)	1.0 to 3.3	N	Corrosion of household plumbing systems	
Chlorine(ppm)	A=	Daily 2014	MRDL 4	MRDLG 4	1.9	0.3 to 2.1	N	Water additive used to control microbes	
	B=	Daily 2014			2.1	.3 to 2.9	N		
Fluoride(ppm)	A=	Bi-Mthly 2014	4	4	0.83	.83 to .83	N	Water additive which promotes strong teeth	
	B=	Bi-Mthly 2014			0.97	.97 to .97	N		
HAA5 Haloacetic Acids(ppb)	D=	Highest 2014 Qrtly AVERAGE	60	N/A	46.7 (highest avg)	10.0 TO 88.1	N	Byproduct of drinking water disinfection	
TTHM (total trihalomethanes)(ppb)	D=	Highest 2014 Qrtly Avg	80	N/A	55.2 (highest avg)	11.0 TO 86.0	N	Byproduct of drinking water disinfection	
Nitrate(ppm)	A=	Feb 2014	10	0	1.3	0.0 to 1.3	N	Fertilize use, leaching from septic tanks, erosion of natural deposits	
	B=	Feb 2014			1.8	0 to 1.8	N		
Dalapon(ppb)	A=	Dec 2014	200	200	2.3	0-2.3	N	Runoff from herbicide used on rights of way	
	B=	-			-	-	N		
Atrazine(ppb)	A=	-	3	3	-	-	N	Runoff from herbicide used on row crops	
	B=	Aug 2014			0.59	0.59	N		
Barium(ppm)	A=	Apr 2014	2	2	0.023	0-.023	N	Drilling waste, metal refineries, erosion of natural deposits	
	B=	Apr 2014			0.034	0-.034	N		

**Detected UCMR3 Results for Brownsville & Wax WTP's**

Our system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by the USEPA. The purpose of monitoring for these contaminants is to help the EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that this data is available. If you are interested in examining the complete list of results, please contact the Edmonson Co. Water District at 270-597-2165 or by mail at P.O. Box 208, Brownsville, KY 42210

Brownsville (A) & Wax (B) WTP's Entry to the distribution system UCMR3 results

Contaminant	Sample Date	MRL	Loc.	Amount Detected	Likely Source
Hexavalent Chromium	Jun-14	0.03ug/l	A=	0.12ug/l	Naturally occurring element; used in making steel and other alloys; chromium-3 or chromium 6 forms are used for chrome plating, dyes and pigments, leather tanning and wood preservation
			B=	0.17ug/l	
Chlorate	Jun-14	20ug/l	A=	24ug/l	Agricultural defoliant or desiccant; disinfection byproduct; used in production of chlorine dioxide
			B=	-	
Strontium	Jun-14	0.30ug/l	A=	130ug/l	Naturally occurring element; historically, commercial use of stronium has been in the faceplate glass of cathode-ray tube televisions to block x-rays
			B=	-	
Vanadium	Jun-14	.20ug/l	A=	0.23ug/l	Naturally occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst
			B=	-	

Brownsville (A) & Wax (B) WTP's Maximum Residence Time site UCMR3 results

Contaminant	Sample Date	MRL	Amount Detected	Likely Source
Hexavalent Chromium	Jun-14	0.03ug/l	A=	Naturally occurring element; used in making steel and other alloys; chromium-3 or chromium 6 forms are used for chrome plating, dyes and pigments, leather tanning and wood preservation
			B=	
Chlorate	Jun-14	20ug/l	A=	Agricultural defoliant or desiccant; disinfection byproduct; used in production of chlorine dioxide
			B=	
Strontium	Jun-14	0.30ug/l	A=	Naturally occurring element; historically, commercial use of stronium has been in the faceplate glass of cathode-ray tube televisions to block x-rays
			B=	
Vanadium	Jun-14	.20ug/l	A=	Naturally occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst
			B=	
Chromium	Jun-14	.20ug/l	A=	Naturally occurring element; used in making steel and other alloys; chromium-3 or chromium 6 forms are used for chrome plating, dyes and pigments, leather tanning and wood preservation
			B=	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/Aids or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791.

Our water system violated one or more drinking water requirements over the past year. Even though these were not emergencies, as our customers, you have the right to know what happened and what we are doing or did to correct these situations. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the periods listed below, we did not monitor or test for the listed contaminants and therefore cannot be sure of the quality of your drinking water during that time.

There is nothing you need to do at this time. The table below lists the contaminants we did not properly test for during the last years, how often we are supposed to sample for the listed contaminants, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and date samples have been taken, and date on which follow-up samples were or will be taken.

The following is a list of Edmonson County Water District's compliance determinations and description of each contaminant and its potential health effects as outlined by Federal EPA Guidelines.

Notice of Violations:
We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the periods listed below, we did not monitor or test for the listed contaminant(s) and therefore cannot be sure of the quality of your drinking water during that time. #1 Compliance Period 7-1-2014: Failure to submit adequate sampling results to meet Chlorine summary requirements. We are required to submit daily chlorine readings from the distribution system. July 24th results were inadvertently omitted. <b>Chlorine.</b> Water additive used to control microbes. Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the periods listed below, we did not monitor or test for the listed contaminant(s) and therefore cannot be sure of the quality of your drinking water during that time. #2 Compliance Period 12/2014: Failure to submit an adequate number of DPB samples (Total Carbon) for the compliance period of Dec. 1-31, 2014. Monthly submittal of raw water alkalinity was required but was not submitted. Unsubmitted results have been forwarded to the Division of Water as required. <b>Total organic carbon.</b> Naturally present in the environment. Total organic carbon (TOC) has no health effects. However, total organic carbon, provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes, or THMs, and haloacetic acids, or HAAs. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the periods listed below, we did not monitor or test for the listed contaminant(s) and therefore cannot be sure of the quality of your drinking water during that time. #3 Compliance Period 2014: Edmonson Co. Water District received a Notice of Violation for Secondary Contaminants. The violation was for the collection of the sample in our distribution system when it should have been taken at the tap of our production facility. This violation is not a reportable incident but the ECWD wants to provide full disclosure about the quality of your drinking water.
For more information contact Tim Brewster, ECWD Compliance Officer by phone at 270-597-3591 or by mail at P.O. Box 208, Brownsville, KY 42210. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Edmonson County Water District routinely monitors for constituents in your drinking water according to Federal and State Laws. This report shows the detected contaminant results of our monitoring for the period of January 1st to December 31, 2014. Some contaminants are not required to be tested for every year, therefore, for some, we are reporting for the most current data available. Contact the Edmonson County Water District for a complete listing of all the contaminants tested for during the year. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. We are required to monitor the source of your drinking water for Cryptosporidium in order to determine whether treatment is a adequate to remove Cryptosporidium from your drinking water. Cryptosporidium was detected in raw water not finished.

The sources of drinking water, both tap water and bottled water; include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts and metals, that may be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems. Radioactive contaminants, which may be naturally-occurring or be the result of oil and gas production and mining activities. To ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. FDA regulations establish limits for contaminants in bottled water that shall provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

**Information about lead** - If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Edmonson Co. Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

\*\*The next compliance sampling period for Edmonson County Water District for lead and copper is scheduled for June-September 2017.

Some or all of these definitions may be found in this report:

**Nephelometric Turbidity Unit (NTU)** - A measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

**Maximum Contaminant Level (MCL)** - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG)** - the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL)** - the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Below Detection Levels (BDL)** - laboratory analysis indicates that the contaminant is not present.

**Not Applicable (N/A)** - does not apply.

**Parts per million (ppm)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb) - or micrograms per liter, (µg/L).** One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system shall follow.

**Treatment Technique (TT)** - a required process intended to reduce the level of a contaminant in drinking water.

**Total Organic Carbon (TOC)** - has no health effects. However, total organic carbon, provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes, or THMs, and haloacetic acids, or HAAs. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

**MRL-Minimum Reporting Level**